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HOUSEKEEPERS' CHAT

Saturday, July 4, 1936

(FOR BROADCAST USE ONLY)

Subject: "GROWTH AND THE SEASONS." Information from the Office of Experiment Stations, United States Department of Agriculture.

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Just by way of celebrating this very special holiday, I am going to pass along to you some unusual news from our regular correspondent in Washington, D. C. So far the news which she has been reporting to us has come direct from the laboratories of the Department of Agriculture at Washington. But today the reports come from two State experiment stations, one in Ohio and one in Texas. The results of these experiments were reported to the U. S. Department of Agriculture which supplies us this summary.

Writes our correspondent: "I suppose that everyone who has ever had -- or ever been -- a growing child is interested in the mysterious process known as growth. Probably fathers and mothers have always been puzzled to know why one child grew tall, and another took on weight, and still another seemed to grow in neither direction for a time. They must always have wondered, too, why children seemed to grow 'by spurts' or 'fits and starts' rather than gradually and regularly.

"Of course, people have long known that inheritance had much to do with growth, that children grew tall or broad partly because their parents and grandparents were built that way. But otherwise luck, or fate, or Providence seemed to decide whether Junior would be tall and thin, or Jane short and plump. Then research in nutrition began to show how much diet affects growth and development.

"The latest news is that researchers have observed what seems to be another influence on growth. And that influence is the season. Perhaps you remember the backwoods legend that bear cubs grow fat in the fall and long in the spring. Well, some investigations of growth in children indicate that this may be the pattern of growth for human cubs also.

"I want to tell you first what nutritionists at the Ohio State Experiment Station observed about the seasonal growth of some young Ohio children ranging in age from 2 to 4 years. These youngsters were all normal, healthy and well-nourished. They all came from homes that supplied them with an adequate diet, healthful surroundings, and the best of care. The nutritionists kept an exact record of what the children ate and how they grew. They checked individual heights and weights at each season during the 2 years of the study.

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"Here's what these records showed about gain in weight. All the youngsters made or exceeded the best standards science now offers for normal gain in weight for these ages. But the children did not take on weight gradually and evenly, month by month and season by season. Autumn proved to be the season especially favorable to growth. The greatest average increase came at this time. And by the way, autumn was also the season when the children seemed to have the best appetite. At least, the records showed that they took the most food during the three fall months. So the researchers report that the season of high food intake is also the period of greatest gain in weight.

"As for height, again these children also made good records. All those in the group but one made the standard gain in height. But again they did not grow tall by even, regular gains. Winter and spring proved to be more favorable to increase in height than the other two seasons.

"So much for the results of the Ohio study of the growth of children of preschool age.

"At the Texas Experiment Station scientists have recently made another study of seasonal variations in growth. This was a study of children of elementary-school rather than pre-school age. And the study included white children, Mexicans and negroes.

"Texas results agreed with Ohio results in the matter of weight and the seasons. All three races made slightly better average gains in weight in the fall than in the other seasons. The monthly gains for the four fall months averaged about 10 percent of the entire yearly gain. October was the month of greatest gain for all three groups. In contrast to this, April was the month of poorest gains.

"The scientists who made this study in Texas say that these seasonal variations in growth in weight did not appear to be influenced by age, birth month, type of body build, sex, or living conditions. Neither did these excellent gains made in October or poorer gains in April seem to be influenced by such factors such as food eaten a few days before weighing, or by minor illnesses or climatic conditions.

"As for growth in height, unlike the Ohio study, Texas records did not show that season had much effect. The investigators checked on both sitting and standing height of these children and found it fairly uniform throughout the year with no consistent seasonal differences."

Our correspondent goes on to say: "These two studies may be of some comfort to the mother of a healthy child who has an adequate diet yet doesn't seem to grow much for a period. They may also be of interest to the mother who wonders why her child makes an uneven growth -- grows a good deal one season and not much the next. But interesting as these facts about seasonal growth are, the Texas investigators have a word of warning to offer parents. They say -- I'm quoting exactly: 'This emphasizes the importance of considering each child individually in his course of growth. A child's failure to gain should not be laid complacently to the season of year. Too much departure from regularity of gain calls for special attention.' (End of quotation.) Nutritionists wish further study before stating more definite conclusions."

I'll ask our correspondent to keep tabs on the research reports coming to the U. S. Department of Agriculture and tell us when further facts on this matter of seasonal growth are developed.

